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REMARKS

This paper is responsive to Final Office Action dated March 26, 2004. Claims 1 – 30 were examined. Claims 12 – 26, 29 and 30 were rejected. Claims 12 and 13 have been amended. Claims 17 and 20 – 26 have been cancelled. The Examiner has indicated that claims 1 – 11, 27 and 28 are allowed. The Examiner has also indicated that claims 13 – 18, 29, and 30 include allowable subject matter. Applicant appreciates the indication of allowable subject matter.

Telephonic Examiner Interview

Applicant thanks the Examiner for taking the time to conduct the Examiner Interview on June 14, 2004. The participants of the Examiner Interview were David H. Malzahn and Steven R. Gilliam. Applicant discussed the claims and rejections of those claims in the Final Office Action. Applicant provided an example of a scalar multiplication that could be decomposed into point doublings without point additions. The Examiner instructed Applicant to include the arguments in the response, which have been included below. Applicant discussed the possibility of amending claim 12 to incorporate the limitations of claim 17. The Examiner agreed that if claim 12 were amended to include the limitations of claim 17, the rejections to claim 12 would be overcome. However, no agreement was reached as to allowability of the claims as they stood at the time of the Examiner Interview.

Rejections under 35 U.S.C. §102(e) and 35 U.S.C. §112, second paragraphClaims 12 – 16 and 18 – 19

The Office has rejected claims 12 and 19 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,490,352 granted to Schroepel (“Schroepel”). The Office has also rejected claims 12 – 18 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Claim 12 has been amended to include the limitations of claim 17. Applicant respectfully submits that claim 12 as amended is not anticipated by Schroepel, and distinctly claims and particularly points out that which Applicant regards as the invention. Schroepel does not disclose or suggest performing point doublings by determining successive x values and

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successive slopes. In addition, claim 12 as amended explicitly defines the term n , and explicitly includes formulas for determining successive slopes and successive x values.

Claim 13 has been amended to clarify the relationship between the point doublings found in claims 12 and 13.

Applicant respectfully submits that independent claim 12 and dependent claim 13 as amended are allowable. Since claims 14 – 16 and 18 – 19 were rejected solely because they depended from a rejected independent claim, Applicant respectfully submits that claims 14 – 16 and 18 – 19 are allowable.


Claims 29 – 30

The Office rejected claims 29 and 30 under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Office characterized claim 29 as mis-descriptive because scalar multiplication cannot be decomposed into one or more point doublings. However, Applicant respectfully submits that a scalar multiplication can be decomposed into a single point doubling or multiple point doublings with point additions. For example, the scalar multiplication $2*2$ can be decomposed into a single point doubling without any point additions. Applicant respectfully submits that claim 29 is allowable. In addition, Applicant respectfully submits that claim 30 is allowable, since claim 30 was only rejected because it depended from claim 29.

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Conclusion

In summary, claims 1 – 16 and 18 – 19, and 27 – 30 are in the case. All claims are believed to be allowable over the art of record, and a Notice of Allowance to that effect is respectfully solicited. Nonetheless, if any issues remain that could be more efficiently handled by telephone, the Examiner is requested to call the undersigned at the number listed below.

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 Steven R. Gilliam	June-28-2004 Date

Respectfully submitted,



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